EPA Environmental Technology Verification Program

ETV Quarterly Report

What do global warming, particulate matter and water contaminants all have in common? Introducing ETV's Three Newest Partners...

The Advanced Monitoring Systems (AMS) Pilot, directed by U.S. EPA's Office of Research and Development (ORD), National Exposure Research Laboratory, chose Battelle as the verification organization in September 1997. Battelle is a not-for-profit research organization serving industry and government through developing, commercializing, and managing technology. The goal of this pilot is to expedite the entrance of new air and water monitoring systems into the environmental technology marketplace. Battelle hosted the first Stakeholder Advisory Committee (SAC) meeting on February 24-25, 1998. The SAC decided that the AMS pilot will focus initially on monitoring systems for air and water applications. The prioritized technology areas for air are real-time field instruments that measure fine particulate matter in ambient air; real-time automated speciating Volatile Organic Compound monitors; portable NO/NO_2 analyzers for small sources; and real-time field monitors for measurement of speciated organics and/or inorganics from point sources.

The prioritized technology areas for water are home test kits for measuring pathogens or metals in drinking water; chemical-specific field probes for monitoring volatile organic compounds or synthetic organic compounds in ground water; and real-time field instrumentation for monitoring pathogens or synthetic organic compounds in surface water.

The Air Pollution Control Technology (APCT) Pilot began in September 1997 with a cooperative agreement between EPA's ORD, National Risk Management Research Laboratory (NRMRL), and Research Triangle Institute (RTI), an independent non-profit organization performing research in many disciplines for government, industry, and other clients throughout the United States and abroad. This pilot is designed to create a highly reputable verification testing program for air pollution control technologies.

The APCT Pilot held its first SAC meeting February 12-13, 1998 in Research Triangle Park, NC during which the first technology category, Paint Overspray Arrestors, was selected for testing. The APCT Team is currently developing the test protocol for this technology category. In addition, the APCT Team is actively soliciting for the next technology category based on control of three broad groups of air pollutants: fine particulates, NO_x, and hazardous air pollutants.

The Climate Change Technologies Pilot, coordinated by U.S. EPA's ORD, NRMRL, selected Southern Research Institute (SRI) as the verification organization in October 1997. SRI is a multi-disciplinary contract research organization and one of the oldest not-for-profit research organizations in the United States.

The main intent of this pilot is to verify technologies that will prevent or control climate change emissions both domestically and internationally. The emission sources for greenhouse gases (GHGs) are numerous and diverse, and a wide variety of prevention and control technologies are needed to solve the potential problems of global climate change. SRI hosted the first executive SAC meeting on March 24 in Washington, DC where the stakeholders decided to initially pursue the following technology areas: natural gas, residential electrical uses, PFCs and SFG, municipal solid waste landfills, and commercial lighting.

April 1998

What's Inside

Pilot Points

Site Characterization & Monitoring Technologies

- Issued verification reports and statements for two Gas Chromatography/Mass Spectroscopy (GC/MS) technologies.
- Completed testing of five Wellhead Monitoring technologies and six Field Analytical Systems for PCBs in Soil and Wipes technologies.
- Held developer conference for the Decision Support Software Technical Evaluation.
- Identified Field Extraction Technologies and Groundwater Sampling Devices as the next two categories.

Drinking Water Systems

- Qualified six field testing organizations (FTOs) located across the country (see http://www.nsf.org/verification for details)
- Calgon Carbon Corporation (a vendor) teamed up with Cartwright, Olsen and Associates (an FTO) for verification testing under this pilot.
- Held informational meeting for interested vendors and FTOs to facilitate the development of working relationships between vendors and FTOs.
- Announced availability of funds to offset the cost of verification testing in this pilot.

P2/Recycling & Waste Treatment Technologies

- Completed ***Recommendations for the State of California Certification Protocol for Alternative Cleaning Chemistries***, a testing protocol, that will be used in both Cal/EPA verification and certification programs.

Indoor Air Products

- A quality manual outlining the quality management system for the Indoor Air Products Pilot was completed by RTI's Environmental Sciences and Engineering Unit in early FY98. This document has been distributed to U.S. EPA staff involved in the pilot.
- Held two stakeholder meetings in February, one for commercial furniture on February 25 and one for ventilation air filters on February 17. At the commercial furniture stakeholder meeting, U.S. EPA and RTI proposed that a pilot verification test be conducted. At the ventilation air filters stakeholder meeting, U.S. EPA and RTI proposed that the pilot move into the next step in the development process - laboratory proficiency testing.

Environmental Technology Evaluation Center (EvTEC)

- Signed a Memorandum of Understanding (MOU) with the Washington State Department of Transportation (WSDOT) to conduct group evaluations of technologies, focusing initially on stormwater best management practices (BMP). WSDOT is building a test facility, and EvTEC will be WSDOT's verification organization. A similar agreement is pending with the State of Washington Department of Ecology to run their technology verification program.
- Signed an MOU with Clark Development Corporation, an agency of the Executive Office of the Government of the Philippines, to jointly address a broad range of environmental issues related to economic development, protection of drinking water, stormwater management, and recycling.

P2 Through Improved Coatings

- Finalized draft versions of the Generic Testing Protocols for the Powder Coatings and UV Curable Coatings technologies.
- Posted an open solicitation for verification testing of Powder Coatings and UV Curable Coatings in the Commerce Business Daily and industry publications.
- Drafting a Generic Testing Protocol for the HVLP Equipment Performance Verification which will be completed within the next month.
- Presented on the ETV CCEP at the EPA Region 1 Conference in Boston and at the National Pollution Prevention Roundtable (NPPR) semi-annual meeting.
- An article is being published in Project Finishing Magazine in Spring 1998 discussing the P2/Coatings and Coating Equipment aspect of the ETV Program.

Emulsified Fuels

- Completed in-house U.S. EPA testing of the A55 Limited Partnership fuels, and produced a draft verification report.

EPA Region 1-New England ETV Outreach Meeting

In December, U.S. EPA Region 1 chaired a workshop on *Environmental Technology Verification: Accelerating the Commercialization of Innovative Environmental Technologies* in Boston, MA as part of its "Golden Opportunity Seminar Series." The purpose of the workshop was to educate the New England environmental technology customer community on ETV, the verification process, and how ETV can assist in facilitating the acceptance of new and innovative technologies. The workshop was attended by approximately 100 private sector innovative technology vendors and developers, consulting engineers, state representatives, and financial and export representatives. This group represents the customers critical to fostering innovation in the environmental technology area and to the success of ETV. A panel consisting of a state representative, a venture capitalist, a vendor whose technology received ETV verification, and the chair of the New England Business Council provided positive input on ETV. All ETV pilot managers and partners were available to meet with vendors and others interested in specific technology areas. As part of the overall ETV Outreach Strategy, similar efforts are under discussion with Region 10.

Web Watch

- ✔ EvTEC has launched a new, enhanced website at http://www.cerf.org/evtec, which features members-only areas for the stakeholder groups, as well as the opportunity to join discussion forums on environmental technology and to check the status of ongoing evaluations.
- ✔ Visit http://www.nsf.org/verification for details on the six new Field Testing Organizations of the Drinking Water Systems Pilot.
- ✔ Check out the ETV website for additional information on our three newest Partners!
- ✔ The "Recommendations for the State of California Certification Protocol for Alternative Cleaning Chemistries" testing protocol is available at http://www.calepa.ca.gov/dtsc/dtsc.htm.
- ✔ Search the Hazardous Waste Clean Up Information website at http://www.clu-in.com for updates on the Site Characterization and Monitoring Technologies Pilot.

International Verification Workshop Under Development

The EvTEC Pilot partner, the Civil Engineering Research Foundation (CERF), recently received a grant from the Asian Pacific Economic Council (APEC) of $75K for conducting an "international verification workshop" to explore options to assure that verified technologies enter the Asian marketplace. CERF is currently defining the scope of the workshop with ETV Program input. The workshop is expected to occur by the end of fiscal year 1998. The source of the APEC grant is pooled funds from many agencies, including U.S. EPA, from the international office of the Department of Commerce. U.S. EPA and APEC also are involved in discussions regarding environmental technology classification for tariff reductions.

Twelve Technologies Verified

Cone Penetrometers

- ✔ **Fugro Geosciences, Inc.; Houston, TX**
- ✔ **U.S. Navy, Naval Command, Control, and Ocean Surveillance Center, Research, Development, Test and Evaluation Division; San Diego, CA**

Field Portable GC/MSs

- ✔ **Brucker Analytical; Billerica, MA**
- ✔ **Viking Instruments; Chantilly, VA**

Field Portable X-ray Fluorescence Analyzers

- ✔ **Metorex, Inc.; Princeton, NJ (2 technologies)**
- ✔ **Scitec, Inc.; Kennwick, WA**
- ✔ **HNU Systems, Inc.; Newton Highlands, MA**
- ✔ **Niton Corporation; Bedford, MA**
- ✔ **TN Spectrace; Round Rock, TX (2 technologies)**

Emulsified Fuel

- ✔ **A-55 Limited Partnership; Reno, NV**

ETV Washington Workshop

The ETV Program is holding a workshop designed to inform participants about the ETV Program, its accomplishments to date, and its future directions. Attendees will interact with the verification organizations carrying out the program in partnership with U.S. EPA as well as vendors whose technologies have been tested by ETV.

The Washington Workshop will be held on April 14, 1998 at the Omni Shoreham Hotel in Washington, DC.

White House Conference in New England Highlights ETV

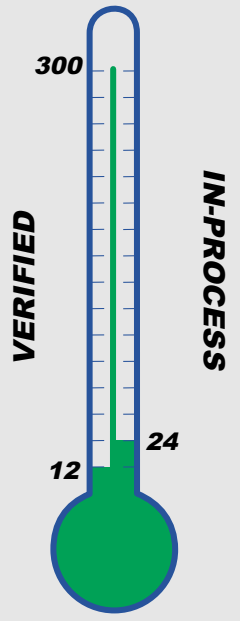
U.S. EPA sponsored a regional conference on environmental technology and re-invention on March 6, 1998 in Nashua, New Hampshire. Discussion at this conference, which included a keynote address delivered by Vice President Al Gore, focused on industry efforts to meet demands for more environmentally beneficial products and technologies in the face of marketplace obstacles. The ETV Program was highlighted as an example of the benefits that third party technology evaluation and verification programs can provide in overcoming marketplace obstacles, including those imposed by regulators. Leaders of the environmental agencies from the six New England states signed an agreement with U.S. EPA at the conference that is intended to accelerate regulatory approval process for technologies used in cleaning up hazardous waste sites (*The Nashua Telegraph*, March 7, 1998).

ETV Upcoming Events

Date	*Location*	*Event*
April 2-4	Chicago, IL	Speech: Indoor Air Products Pilot at the NAFA Meeting
April 14	Washington, DC	ETV Washington Workshop
April 15-16	Washington, DC	ETV Team and Partner Meeting
April 20	Ft. Mitchell, KY	Package Drinking Water Treatment Systems Pilot Steering Committee Meeting
April 28	Cincinnati, OH	Speech: ETV Program at the NPPR Spring Conference
April 29	Cincinnati, OH	ETV Panel Presentation
May 5	Boston, MA	Speech and Exhibit: ETV Program at the Environmental Expo New England
May 6	RTP, NC	P2 Through Improved Coatings Pilot Stakeholder Meeting
May 20	RTP, NC	Air Pollution Control Technologies Stakeholder Advisory Committee Meeting
June 17	San Diego, CA	ETV Workshop: AWMA Conference

For more details on ETV Upcoming Events, check out our online calendar at http://www.epa.gov/etv/highup.htm

GOAL: 300 Technologies Verified by 2005



Don't forget to check out the ETV website, which is also linked to our Partners: http://www.epa.gov/etv

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